



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,033	01/22/2007	Ralf Dunkel	2400.0330000/SRL	4397
26111 7590 01/15/2008 STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER CHO, JENNIFER Y	
			ART UNIT 1621	PAPER NUMBER
			MAIL DATE 01/15/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/579,033	DUNKEL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Jennifer Y. Cho	1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 5-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/28/07</u> . | 6) <input type="checkbox"/> Other: _____  |

### **Detailed Action**

This office action is in response to Applicant's communication filed on 11/2/2007.

Claims 1-7 are pending in this application.

Applicant's election with traverse of Group II, claims 1-2 and 4 (in part), in which A is the radical of the formula (A2), in the reply filed on 11/2/2007 is acknowledged. The restriction was done under the wrong statute, thus the following restriction demonstrating a lack of unity of invention, is made of record. However, Applicant's election is still relevant to the restriction as presented herein. Thus claims 1-2 and 4 (in part), in which A is the radical of the formulas (A1, A3, A4, A5, A6, A7, A8, A9, A10), along with claims 3 and 5-7 are withdrawn from consideration being drawn to the non-elected invention.

### **IDS**

The information disclosure statement (IDS) filed on 2/8/2007 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

- I. Claims 1-2 and 4 (in part), in which A is the radical of the formula (A1), drawn to a silylated carboxamide, classified in class 556, subclass various.
- II. Claims 1-2 and 4 (in part), in which A is the radical of the formula (A2), drawn to a silylated carboxamide, classified in class 556, subclass various.
- III. Claims 1-2 and 4 (in part), in which A is the radical of the formula (A3) and (A4), drawn to a silylated carboxamide, classified in class 556, subclass various.
- IV. Claims 1-2 and 4 (in part), in which A is the radical of the formula (A5), drawn to a silylated carboxamide, classified in class 556, subclass various.
- V. Claims 1-2 and 4 (in part), in which A is the radical of the formula (A6), drawn to a silylated carboxamide, classified in class 556, subclass various.
- VI. Claims 1-2 and 4 (in part), in which A is the radical of the formula (A7), drawn to a silylated carboxamide, classified in class 556, subclass various.

- VII. Claims 1-2 and 4(in part), in which A is the radical of the formula (A8), drawn to a silylated carboxamide, classified in class 556, subclass various.
- VIII. Claims 1-2 and 4 (in part), in which A is the radical of the formula (A9), drawn to a silylated carboxamide, classified in class 556, subclass various.
- IX. Claims 1-2 and 4 (in part), in which A is the radical of the formula (A10) and (A11), drawn to a silylated carboxamide, classified in class 556, subclass various.
- X. Claim 3, drawn to a process of making the silylated carboxamides, classified in class 556, subclass various.
- XI. Claim 5, drawn to a method of using the silylated carboxamides, classified in class 514, subclass various.
- XII. Claim 6, drawn to a method for controlling unwanted microorganisms, classified in class 514, subclass various.
- XIII. Claim 7, drawn to a process for preparing compositions for controlling unwanted microorganisms, classified in class 514, subclass various.

The inventions listed in Groups 1-13 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Claim 1 clearly lacks a special technical feature being anticipated or obvious over the X reference of Costa et al. (Journal of Organic Chemistry, 69(7), 2469-2477) (see search report).

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows: The patentably distinct compounds exemplified in the specification.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a). The following claim(s) are generic: 1-18.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Clearly claim 1 lacks a special technical feature for the reason already mentioned. The examples in the specification are patentably distinct because prior art anticipating and/or rendering obvious one species would not necessarily anticipate and/or render obvious the other species.

Affirmation of this election must be made by applicant in replying to this Office action.

A telephone call was made to Cynthia Bouchez on 9/10/07 at 202 371 2600 to request an oral election to the above restriction requirement, but did not result in an election being made.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are

subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

### **Claim Rejections – 35 USC 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 provides for the use of a silylated carboxamide, but since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 5 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966). See MPEP 2173.05(q).

### **Claim Rejections - 35 USC 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

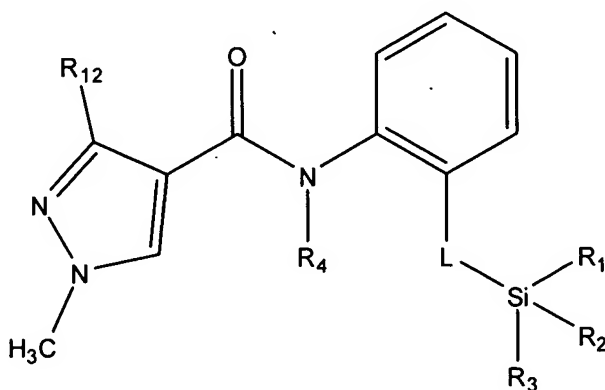
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

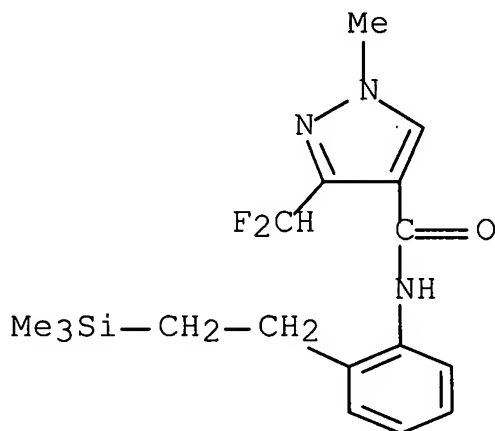
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-2 and 4 (in part), in which A is the radical of the formula (A2), are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehrenfreund et al. (WO 03/080628), in view of Silverman (The Organic Chemistry of Drug Design and Drug Action, 1992, Academic Press Inc., page 16).

The instant claims are drawn to a pyrazole silylated carboxamides of formula (I), in which A is the radical of the formula (A2), and their compositions with extenders and/or surfactants, with the following base structure:



Ehrenfreund et al. teaches a pyrazole silylated carboxamides and their compositions with surfactants (page 8, last paragraph; page 9, first two lines), with the following structure (page 7, table A, compound A.45; page 17, Table F)



Ehrenfreund et al. is deficient in the sense that the pyrazole ring is substituted with a difluoromethyl substituent, instead of a dichloromethyl substituent.

Silverman teaches that fluorine and chlorine atoms are classical isosteres and show similar chemical and biological properties (page 19, last paragraph and Table 2.2, compounds 1a).

Therefore, it would be prima facie obvious to one of ordinary skill in the art at the time of the invention, to use the teaching of Silverman to substitute the fluorines for chlorines on the methyl group of Ehrenfreund et al. pyrazole silylated carboxamides, with the reasonable expectation that the compounds would be useful as fungicides. Furthermore, Ehrenfreund teaches the substitution of a fluorine for a chlorine in their examples, within the same table (see compounds A.78 and A.79 on page 8, Table A). Absent any showing of unusual and/or unexpected results over Applicant's particular

halogen substitution on the methyl group, the art obtains the same effect on the compound's efficacy and utility. Indeed, both Applicant's and Ehrenfreund et al.'s compounds share the same utility, being used as fungicides (abstract). Thus, the expected result would be the effective synthesis of pyrazole silylated carboxamides and their compositions to control fungal growth.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Y. Cho whose telephone number is (571) 272 6246. The examiner can normally be reached on 9 AM - 6 PM.

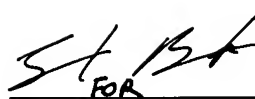
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on (571) 272 0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jennifer Cho  
Patent Examiner  
Art Unit: 1621

Application/Control Number:  
10/579,033  
Art Unit: 1621

Page 12

A handwritten signature in black ink, appearing to read 'St. Bt' with a horizontal line underneath.

---

Yvonne Eyler  
Supervisory Patent Examiner  
Technology Center 1600